

In the Claims:

Please cancel claims 1-20 and 42-49 without disclaimer or prejudice, amend claims 21, 27, 30, 36, 37, 38, 39 and add new claims 50-55 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

1 – 20. (cancel)

21. (currently amended) A screw back out prevention device for use with cervical plates to inhibit bone screws from backing out, the prevention device comprising:

a bushing;

the bushing having an inner edge forming a gap through which a screw can be threaded;

at least one elastically-loaded pin;

at least one notch located in a head of the screw, the at least one elastically-loaded pin engages the at least one notch; and

the bushing resides between the head of the screw and the cervical plate such that the at least one elastically-loaded pin engages the screw when the screw is threaded to inhibit the screw from backing out.

22. (original) The screw back out prevention device according to claim 21, wherein the elastically-loaded pin engages at least one thread of the screw.

23. (cancel)

24. (cancel)

25. (original) The screw back out prevention device according to claim 21, wherein the at least one elastically-loaded pin comprises a plurality of elastically-loaded pins.

26. (original) The screw back out prevention device according to claim 21, further comprising at least one channel in the bushing corresponding to the at least one elastically-loaded pin, wherein a portion of the elastically-loaded pin resides in the at least one channel.

27. (currently amended) A screw back out prevention device for use with cervical plates to inhibit bone screws from backing out, the prevention device comprising:

a bushing;

the bushing having an inner edge forming a gap through which a screw can be threaded;

at least one elastically-loaded pin;

at least one channel in the bushing corresponding to the at least one elastically-loaded pin, wherein the elastically-loaded pin resides in the at least one channel;

~~The screw back out prevention device according to claim 26, further comprising~~
at least one spring between the bushing and the at least one elastically-loaded pin; and

the bushing resides between the head of the screw and the cervical plate such that the at least one elastically-loaded pin engages the screw when the screw is threaded to inhibit the screw from backing out.

28. (original) The screw back out prevention device according to claim 27, wherein the at least one spring comprises a helical spring.

29. (original) The screw back out prevention device according to claim 27, wherein the elastically-loaded pin has elastic movement caused by at least one of pneumatics, magnetics, and shaped memory alloys.

30. (currently amended) A back out prevention device for a cervical plate, the prevention device comprising:

a bushing;

a screw; and

at least one bonding material, wherein

the bushing having an inner sidewall, the at least one bonding material residing on at least one portion of the inner sidewall at a location determined prior to threading, wherein

the screw comprises a screw head and a shank, wherein

the screw head having an outer sidewall, the at least one bonding material residing on at least one portion of the outer sidewall at a location determined prior to threading, wherein

when the screw is threaded into a vertebral body, the at least one bonding material on the at least one portion of the inner sidewall substantially aligns with the at least one bonding material on the at least one portion of the outer sidewall forming a bond that inhibits the screw from backing out.

31. (original) The screw back out prevention device according to claim 30, wherein the bonding material is a self-bonding material.

32. (original) The screw back out prevention device according to claim 30, wherein the bonding material is at least one of a thermally activated bonding material, pressure activated bonding material, an electrically activated bonding material, and a radiation activated bonding material.

33. (original) The screw back out prevention device according to claim 30, wherein the bonding material is at least one of an epoxy, an acrylics, a resin, a silicone, an adhesive, a glue, and a tape.

34. (original) The screw back out prevention device according to claim 31, wherein the at least one self bonding material is in a form of a washer and the at least

one self bonding material resides in a first notch on the inner sidewall and a second notch on the outer sidewall.

35. (original) The screw back out prevention device according to claim 31, wherein the at least one self bonding material is coated on the inner sidewall and the outer sidewall.

36. (currently amended) A back out prevention device for a cervical plate, the prevention device comprising:

a screw hole in a cervical plate;

a screw; and

at least one bonding material, wherein

the screw hole having an inner sidewall; and at least a first of the at least one bonding material residing at a location determined prior to threading the screw on at least one portion of the inner sidewall, wherein

the screw comprises a screw head and a shank, wherein

the screw head having an outer sidewall; and at least a second of the at least one bonding material residing at a location determined prior to threading the screw on at least one portion of the outer sidewall, wherein

when the screw is threaded into a vertebral body, the ~~at least one~~ first bonding material ~~on the at least one portion of the inner sidewall~~ substantially aligns with the ~~at least one~~ second bonding material ~~on the at least one portion of the outer sidewall~~ forming a bond that inhibits the screw from backing out.

37. (currently amended) The screw back out prevention device according to claim 36, wherein the at least one bonding material is a self-bonding material.

38. (currently amended) The screw back out prevention device according to claim 36, wherein the at least one bonding material is a thermally activated bonding

material, a pressure activated bonding material, an electrically activated bonding material, and a radiation activated bonding material.

39. (currently amended) The screw back out prevention device according to claim 36, wherein the at least one bonding material is at least one of an epoxy, an acrylic, a resin, a silicone, an adhesive, a glue, and a tape.

40. (original) The screw back out prevention device according to claim 37, wherein the at least one self bonding material is in a form of a washer and the at least one self bonding material resides in a first notch on the inner sidewall and a second notch on the outer sidewall.

41. (original) The screw back out prevention device according to claim 37, wherein the at least one self bonding material is coated on the inner sidewall and the outer sidewall.

42 – 49 (canceled)

50. (new) The screw back out prevention device according to claim 30, wherein the bond that is formed is a mechanical bond.

51. (new) The screw back out prevention device according to claim 50, wherein the mechanical bond is a frictional bond.

52. (new) The screw back out prevention device according to claim 30, wherein the bond that is formed is a chemical bond.

53. (new) The screw back out prevention device according to claim 36, wherein the bond that is formed is a mechanical bond.

54. (new) The screw back out prevention device according to claim 53, wherein the bond that is formed is a frictional bond.

55. (new) The screw back out prevention device according to claim 36, wherein the bond that is formed is a chemical bond.